REMARKS

In the Office Action, the Examiner rejected claims 1-35 under 35 USC § 102(e). This rejection is fully traversed below.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTIONS OF CLAIMS 1-35 UNDER 35 USC 102(e)

In the Office Action, the Examiner rejected claims 1-35 under 35 USC § 102(e) as being anticipated by Suda (U.S. Patent Publication 2004/0123059). Applicants' respectfully disagree.

In general, the invention pertains to a removable data storage device that intelligently operates as one large data storage region or as multiple, smaller data storage regions. The removable data storage device can be used in not only modern electronic products (using 32-bit addressing) but also legacy products (using 16-bit addressing). A host device can couple to the removable storage device to access data stored in/to the removable storage device. In general, host devices are electronic devices such as cameras, hand-held computers, set-top boxes, hand-held or other small audio players/recorders (e.g., MP3 devices), and medical monitors.

Claim 1 pertains to a method for reading data from a memory card that provides non-volatile storage. The method can be explained as follows. According to claim 1, a memory card is initially activated as a single (initial) volume. From the initial volume, volume information is retrieved. Then, based on the volume information, it is determined whether one or multiple volumes are present on the memory card. For example, the volume information can indicate whether the volume is formatted for FAT-16 files (as opposed to FAT-32 files). In the event that the volume information indicates that only one volume is present on the memory card, the memory card is operated as a single volume. On the other hand, when the volume information indicates that multiple volumes are present on the memory card, the memory card is operated as a plurality of distinct volumes. Therefore, the invention as recited in claim 1 requires that the volume information provided is stored within and is an integral part of the volume itself as illustrated in, for example, Fig. 7. In this way, since the volume information is stored in the same volume (and therefore within the same range of address locations as the volume) accessing the volume information is performed in the same manner as accessing any data stored in the volume itself and therefore no special decoder circuitry or addressing schemes are required.

In contrast, Suda describes a memory card that can have a plurality of storage areas. The memory card is able to switch between the plurality of storage areas so that the memory card can utilize a storage capacity larger than the marginal capacity of the file system. That is, given the plurality of storage areas, memory card in Suda merely selects one of the storage areas to be utilized at a given point in time. The sum of the capacities of the plurality of storage areas is the total capacity of the memory card.

In order to determine whether the memory card has a plurality of storage areas Suda uses at least one internal register that is separate and distinct from the storage areas. For example, internal register 18 for the plural storage areas "retains the quantity of all of the areas inside the memory card 3 and a flag indicating the area which is currently selected." Suda, col. 3, paragraph 43. As such, Suda does <u>not</u> teach or suggest that the volume information is stored within the range of address locations that define the volume itself. On the contrary, Suda specifically teaches "internal registers" that are separate and distinct from the associated storage areas. This can be readily appreciated by viewing any of Suda's figures and the accompanying text. For example, Fig. 1 shows first storage area 11a, second storage area 11b and so on each being associated with a separate and distinct first internal register 12a, second internal register 12b, etc. In this way, by requiring the use of internal registers that are separate and distinct from the respective storage areas, the memory card described by Suda requires special decoding resources in order to access each of the internal registers. These special decoding resources are in addition to the decoding resources used to access the data stored in the various storage areas thereby greatly increasing the complexity of the memory card.

In contrast to Suda, the invention teaches that the volume information is stored in the volume itself by specifying a range of addresses that is a proper subset of the range of addresses that defines the particular volume. For example, at paragraph [0045] of the specification,

FIG. 5A is a diagram illustrating a single volume address space 500 suitable for use with the invention. The address space represents a two (2) gigabyte range of logical addresses from 000000$_{HEX}$ through 7FFFFF$_{HEX}$. *__Within the address space 500 there is stored volume information 502 and host supplied data 504__*. The volume information 502 contains at least an indication of whether the address space is configured as a FAT-16 file format. Here, the address space covers a four (4) gigabyte range, and thus if a FAT-16 file format were to be utilized with this configuration, only 50% of the available data storage could be utilized. Hence, the address space 500 shown in FIG. 5A is suitable for use with a file system supporting thirty-two bit (32-bit) addressing (i.e., FAT-32 file format).

In this way, a host device is not required to access a separate internal register using special decoding circuitry in order to ascertain the status of the memory storage areas.

Furthermore, by utilizing the volume itself to store relevant volume information, the volume information can be stored at any range of addresses in a particular volume thereby providing for a single memory card to be formatted for use with both the FAT-16 and FAT-32 file system concurrently as illustrated in Fig. 7 and described in paragraphs [0052-0053].

For the reasons noted above, it is submitted that claim 1 is patentably distinct from Suda.

Similarly, claims 13. 19, 26, and 28 recite essentially the same limitations as does claim 1 and it is submitted that claims 1, 13, 19, 26 and 28 are patentably distinct from Suda. In addition, it is submitted that dependent claims 2-12, 14-18, 20-25, 27 and 29-35 are also patentably distinct for at least the same reasons. The additional limitations recited in the independent claims or the dependent claims are not further discussed, as the above discussed limitations are clearly sufficient to distinguish the claimed invention from Suda. Thus, it is respectfully requested that the Examiner withdraw the rejection of claims 1-35 under 35 USC §102(e).

SUMMARY

It is submitted that claims 1-35 are patentably distinct from Suda. Reconsideration of the application and an early Notice of Allowance are earnestly solicited.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants' believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Applicants' hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 500388 (Order No. SDK1P017).

Respectfully submitted,
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